Krushal with

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Dr. I.J. Good Department of Statistics and Statistical Laboratory Virginia Polytechnic Institute and State University Blacksburg, Virginia 24061

Dear Dr. Good.

Apropos the postscript to Statistical Fallacies: I wonder if you chose the most fortunate example about the irrelevance of a retrospective study. In fact, there is a socially important inference that can be made from the (factual) finding that the grandparents of idiots are mostly normal. That is: the probability of normal people having idiotic grand-children must be close to the incidence of idiocy in the total population. That assertion would be falsified by a contrary finding, the extreme of which is self-evident - for example if the grandparents of idiots were always abnormal.

The inference that I assert here is perhaps not thought of as being as important as a causal claim, and it is certainly a weaker assertion. However, it may often be the most important finding from a retrospective study.

I am certainly not attempting to weaken your criticism of the retrospective approach, but so much important and useful information has come, and sometimes may only come, from this technique that I hoped to offer a somewhat different perspective. The recent work by Herbst et al. on tracing the mothers of girls with vaginal cancer and finding that very many of them had been treated with DES during pregnancy is perhaps one of the most striking recent examples.

I am looking forward to the appearance of your article with great interest and also to any further comments that may develop.

Sincerely yours,

Joshua Lederberg Professor of Genetics

JL/rr cc: Dr. William Kruskal 600D, F. J